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| | | | ART UNIT | PAPER NUMBER |
| | | | 3722 | |

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/645,832

Applicant(s)

SAWYER ET AL.

Examiner

Erica E Cadugan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) 7-12 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6, 13 and 14 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/29/04 & 6/1/04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-6 in the reply filed on April 1, 2005 is acknowledged. Examiner additionally notes that new claims 13-14 read on the invention of Group I.
2. Claims 7-12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on April 1, 2005.

Priority

3. Examiner notes that the filing receipt of the application sets forth that this application is claiming benefit of 60/405,067, filed 8/20/2002, 60/405,068, filed 8/20/2002, and 60/405,069, filed 8/20/2002. Examiner can find no place in the application contents wherein Applicant made reference to or attempted to claim priority of, either properly or improperly, 60/405,068. Thus, it appears that this may have been a mistake on the part of the office. 60/405,068 will be removed from the priority claim section of the filing receipt.

In the event that there was a paper in the case that Examiner did not see, or that was misplaced, where Applicant did make reference to 60/405,068, Examiner notes that Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e) as follows:

A reference to the prior application must be inserted as the first sentence(s) of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e) or 120. See 37

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CFR 1.78(a). For benefit claims under 35 U.S.C. 120, the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. Also, the current status of all nonprovisional parent applications referenced should be included. (NOTE: the first sentence of the application sets forth a priority claim to 60/405,067 and 60/405,069 only.)

If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was

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due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Information Disclosure Statement

4. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered. (It is specifically noted that not all of the references mentioned on page 1 of the specification are cited on an information disclosure statement.)

Specification

5. The disclosure is objected to because of the following informalities: the status of the applications mentioned in the second paragraph of page 1 of the application needs to be updated (e.g., adding "now abandoned" or "now U.S. Pat. No. ...", as appropriate).

Appropriate correction is required.

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: it does not appear that the specification provides any antecedent basis for an apparatus that includes the combination of "a cutting machine", "a drilling machine", and "a computer including an optimizing program for receiving raw material information and

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determining how to process material by driving the pusher to feed material to the cutting machine and the drilling machine” as set forth in independent claim 1. Note that Examiner has also included a new matter-type rejection under 35 USC 112, first paragraph below. It is noted that presently, it appears that the specification as originally filed does not support a claim having such limitations, and thus, providing antecedent basis in the specification for such would merely introduce new matter into the specification. However, in the event that it is established that support as originally filed does exist for such, clear antecedent basis in the specification for such needs to be provided.

Drawings

7. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the apparatus including the combination of a “cutting machine” and a “drilling machine” and also including “a computer including an optimizing program for receiving raw material information and determining how to process material by driving the pusher to feed material to the cutting machine and the drilling machine” as set forth in claim 1; the apparatus including the combination of a “cutting machine”, a drilling machine” and also including that “the pusher is operatively connected to at least one computer, the computer being programmed to optimize cutting of stock to satisfy a cut list” as set forth in claim 4; “the radial arm saw” of claim 6; the “sliding panel saw” of claim 6; the “tube cutting saw” of claim 6; the “boring machine” of claim 6; the “punch press” of claim 6; the “vertical router” of claim 6; the “metal shear” of claim 6; the “horizontal mortiser” of claim 6; and the “tenoner” of claim 6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

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Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

8. Claim 3 objected to because of the following informalities: in claim 3, line 1, it appears that "having" should be changed to --has--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 1-6 and 13-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which

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was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As set forth in the amendment of April 1, 2005, independent claim 1 sets forth an apparatus including the combination of a “cutting machine positioned along the processing path”, a “drilling machine positioned along the processing path”, and a “computer including an optimizing program for receiving raw material information and determining how to process material by driving the pusher to feed material to the cutting machine and the drilling machine”. The specification as originally filed does not appear to support such a combination.

Note that it appears that the specification as originally filed does provide support for the use of the claimed computer with such an optimizing program in combination with a saw device alone (page 19, line 20 through page 21, line 11, for example), but does not appear to provide support for the use of the claimed computer with such an optimizing program with an apparatus also including a drilling machine, and particularly does not appear to support such a computer that has an optimizing program that determines “how to process material by driving the pusher to feed material” to “the drilling machine” as now set forth in independent claim 1.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 1-6 and 13-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In claim 1, line 9, it is unclear, via the lack of a modifying article such as “the” or “said”, whether “materials” is intended to be the same as or different from the “materials” previously set forth in line 1 of the claim. If they are the same, Examiner suggests inserting a definite article such as --the-- prior to “materials” in claim 1, line 9. A similar situation exists in claim 1, next-to-last line, and in claim 1, last line. Examiner suggests changing “feed material to the cutting machine...” to --feed the materials to the cutting machine...” in the last line of claim 1.

Also in claim 1, line 9, it is preferred that “toward each machine” be changed to --towards each of the machines-- for clarity. A similar situation exists in claim 2, line 1, wherein it is preferred that “each machine” be changed to --each of the machines-- for clarity.

In claim 1, last three lines, it is unclear as claimed in what way the determination of how to process material is made “by driving the pusher to feed material to the cutting machine and the drilling machine”.

In claim 2, line 2, “the machine” lacks sufficient antecedent basis in the claim. Examiner suggests inserting --respective-- between “the” and “machine” in claim 2, line 2.

In claim 4, it is unclear as claimed if “at least one computer” is supposed to further limit the “computer” of claim 1. It is further unclear whether the “computer being programmed to optimize cutting of stock to satisfy a cut list” is supposed to further limit the “computer including an optimizing program...” of claim 1.

In claim 4, line 2, “the computer” lacks sufficient antecedent basis (unclear what “computer” is being referred to).

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In claim 4, it is noted that the term “stock” is used instead of “materials” as was previously set forth in claim 1. Examiner recommends being consistent throughout the claims with either one of “stock” or “materials” for clarity.

In claim 5, it is unclear as claimed if applicant is attempting to set forth that the drilling machine can be used as a saw. If so, it is noted that this raises other issues with respect to the specification not providing antecedent basis for such, with respect to this being a new matter issue with respect to 35 USC 112, first paragraph, and with respect to this being a claimed feature that is not shown. If not, Examiner suggests changing “wherein at least one of the machines is a saw” to --wherein the cutting machine is a saw--. A similar situation exists with claim 6, wherein it is unclear as claimed if applicant is attempting to set forth that the drilling machine can be used as a “radial arm saw, sliding panel saw...”, etc. If not, Examiner suggests changing “wherein the machines are selected from the following group...” to --wherein the cutting machine is selected from the following group...-- (assuming that the issues with respect to the claimed subject matter not being shown in the drawings are corrected).

In claim 14, Examiner suggests inserting “, respectively” after “drilling machine” for clarity.

Double Patenting

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

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provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 1, 4, and 5 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7-8 of copending Application No. 10/964,553. Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences amount to differences in phrasing that do not substantively change the scope of the claim. Additionally, with respect to claim 7 of the '553 application, note that the more specific "saw station" serves to anticipate the broader "cutting machine" of present claim 1. (See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

16. Claims 1, 5, 6, and 14, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,640,855 to Giles.

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Giles teaches an apparatus including a “cutting machine” in the form of either saw 52 or universal mill 54, and also including a “drilling machine” including a high speed drill bit 56 (col. 4, lines 64-66, also Figure 1), wherein these machines are “positioned along” a “linear processing path” (Figure 1). A workpiece 20 is transferred towards these machines via a mover 50, considered a “pusher” as broadly claimed, noting that the mover 50 inherently “pushes” against the workpiece in some fashion or else the workpiece would not move as described (col. 4, lines 31-45). Additionally, note that the apparatus includes a computer 30 that includes a program, considered, as broadly claimed, an “optimizing program”, since the program is used to tailor specifics of the operation, such as type of cut, dimension of cut, location of cut (col. 3, lines 31-40) to a particular desired workpiece, i.e., to “optimize”, as broadly claimed, the process for that particular workpiece.

Re claim 14, note that the “pusher” 50 can move in opposite directions (col. 4, lines 32-63). (Note that adding --, respectively-- as suggested by Examiner to the end of claim 14 will clarify this limitation such that Giles does not teach claim 14 since the pusher 50 of Giles does not push the workpiece in a first direction towards the cutting machine and in a second opposite direction towards the drilling machine.)

Claim Rejections - 35 USC § 102/103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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18. Claim 3, as best understood, is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Pat. No. 6,640,855 to Giles as applied to claim 1 above.

Giles teaches all aspects of the present invention as set forth in the above rejection based thereon. Additionally, firstly, note that as broadly claimed, each of the machines 52, 54, and 56 “has” (as broadly claimed) the computer 30 (Figure 1). Additionally/alternatively, note that each of the workstations 32a-32c can be considered a “controller” as claimed (see Figure 1, also col. 5, lines 27-34).

Further note that Giles teaches the use of the control panel 32 as a user interface (Figure 1, col. 1, lines 39-40). Further note that each of the workstations 32a-c is described as a CAD workstation (col. 5, lines 27-34). It is considered inherent that a CAD workstation has some sort of “keypad” device, such as a keyboard, or else the designer described in col. 5, lines 27-34 would not be able to utilize the CAD workstation to perform any CAD as described in col. 5, lines 27-34. Additionally, it is noted that it is considered inherent that some sort of “keypad” (even if it’s a touch-screen or a mouse) must be present in order for the control panel 32 to be able to function as a user interface as described previously.

In the alternative, Giles does not explicitly teach that the user interface 32 or the CAD workstations 32a-c include keypad devices.

However, Examiner takes Official Notice that keypads are well-known and widely used as user interfaces, and Examiner further takes Official Notice that it is well-known that CAD workstations utilize at least a keyboard (considered, as broadly claimed, a keypad) for the purpose of enabling a user to interact with the CAD system to thus perform CAD.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized such a well-known keypad with the control panel and/or the CAD workstations for the purpose of providing a well-known and widely-used, and thus readily available, structure for enabling the user to provide input to either of the control panel or the CAD workstations.

Claim Rejections - 35 USC § 103

19. Claim 2, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,640,855 to Giles as applied to claim 1 above, and further in view of U.S. Pat. No. 2,108,823 to Lyon and U.S. Pat. No. 2,200,894 to Rasmussen.

Giles teaches all aspects of the present invention as set forth in the above rejection based thereon, but does not teach “an interlock device that prevents the machine from operating when the pusher is moving” as set forth in claim 2.

Lyon teaches such an interlock device in use with a drilling or boring device (page 1, left column, lines 36-41 and page 1, right column, line 17-21), and explicitly teaches that this provision provides “for optimum safety in the operation of the machine” and eliminates “the danger of the work piece or the parts of the machine being damaged by operation of any of the mechanism at the wrong time” (page 1, left column, lines 8-17).

Rasmussen teaches such an interlock device in use with a saw device (page 1, left column, lines 19-23, which, as one of ordinary skill in the art would be readily aware, serves to protect the workpiece and the tool from being damaged accidentally during the feeding of the work piece.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the drill taught by Giles with the interlock taught by Lyon and to have provided the saw taught by Giles with the interlock taught by Rasmussen for the purpose of protecting the workpiece and/or the parts of the machine from damage by operation of any of the parts of the device at the wrong time during feeding of the work piece.

20. Claims 3-4, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,640,855 to Giles as applied to claim 1 above, and further in view of U.S. Pat. No. 5,444,635 to Blaine et al.

Giles teaches all aspects of the present invention as set forth in the above rejection based thereon, but does not teach a computer “programmed to optimize cutting of stock to satisfy a cut list”. Re claim 3, in the event that it is determined that Giles does not teach a keypad (see 103 alternative rejection above based on Giles), then Giles does not explicitly teach a keypad.

Blaine et al. teaches a computer that is used with a cutting device that carries out an optimizing algorithm to determine a “cut list” (col. 2, lines 25-65, for example). Note that the computer 34 utilizes a keypad 30 (Figure 1, col. 3, lines 54-65, for example).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted the computer (having the keypad) with the optimizing algorithm that determines a cut list as taught by Blaine for the programmable computer taught by Giles for the purpose of enabling the cutting system taught by Giles to “achieve a substantial efficiency at a cost effective price” as taught by Blaine (see col. 2, line 64 through col. 3, line 1).

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21. Claims 1, 3-6, 13, and 14, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 4,694,871 to Jenkner in view of U.S. Pat. No. 5,444,635 to Blaine et al.

Jenkner teaches an apparatus having a “linear processing path” (as broadly claimed, can be considered either horizontal or vertical as viewed in Figure 1, or even having both horizontal and vertical linear portions as viewed in Figure 1). The apparatus includes both a saw carriage (22 is a saw slit), see Figures 1-2, and a boring or drilling device 50, both positioned “along” the “processing path” as broadly claimed.

12 is a workpiece advancing device (Figures 1-2, col. 2, line 43, for example), considered a “pusher” as broadly claimed. Note that the workpiece slide 30 can be driven towards the cutting and drilling machine (see col. 5, lines 17-21), and thus is considered “configured to feed materials toward each machine” since it is capable of so feeding.

Jenkner further teaches the use of a computer or controller (col. 5, lines 8-16).

Re claim 13, note that the “pusher” 12 extends between the saw and the boring device (Figure 1).

Re claim 14, note that as broadly claimed, the “pusher” moves in opposite directions (col. 5, lines 15-37, for example).

However, re claim 1, Jenkner does not appear to teach an “optimizing program” that makes any sort of determination on how to process material, as best understood.

Also, re claim 3, Jenkner does not appear to explicitly teach that the controller or computer has a keypad.

Re claim 4, Jenkner does not teach that the computer is programmed “to optimize cutting of stock to satisfy a cut list”.

Blaine et al. teaches a computer that is used with a cutting device that carries out an optimizing algorithm to determine a “cut list” (col. 2, lines 25-65, for example). Note that the computer 34 utilizes a keypad 30 (Figure 1, col. 3, lines 54-65, for example).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted the computer (having the keypad) with the optimizing algorithm that determines a cut list as taught by Blaine for the programmable computer taught by Jenkner for the purpose of enabling the cutting system taught by Giles to “achieve a substantial efficiency at a cost effective price” as taught by Blaine (see col. 2, line 64 through col. 3, line 1).

22. Claim 2, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Jenkner in view of Blaine as applied to claim 1 above, and further in view of U.S. Pat. No. 2,108,823 to Lyon and U.S. Pat. No. 2,200,894 to Rasmussen.

Jenkner in view of Blaine teaches all aspects of the present invention as set forth in the above rejection based thereon, but does not teach “an interlock device that prevents the machine from operating when the pusher is moving” as set forth in claim 2.

Lyon teaches such an interlock device in use with a drilling or boring device (page 1, left column, lines 36-41 and page 1, right column, line 17-21), and explicitly teaches that this provision provides “for optimum safety in the operation of the machine” and eliminates “the danger of the work piece or the parts of the machine being damaged by operation of any of the mechanism at the wrong time” (page 1, left column, lines 8-17).

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Rasmussen teaches such an interlock device in use with a saw device (page 1, left column, lines 19-23, which, as one of ordinary skill in the art would be readily aware, serves to protect the workpiece and the tool from being damaged accidentally during the feeding of the work piece.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the drill taught by Jenkner with the interlock taught by Lyon and to have provided the saw taught by Jenkner with the interlock taught by Rasmussen for the purpose of protecting the workpiece and/or the parts of the machine from damage by operation of any of the parts of the device at the wrong time during feeding of the work piece.

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

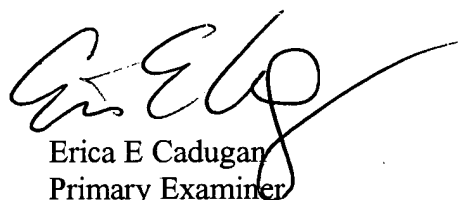
24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica E Cadugan whose telephone number is (571) 272-4474. The examiner can normally be reached on M-F, 7:30 a.m. to 5:00 p.m., alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris H. Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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Art Unit 3722

eec
June 8, 2005